

**REMARKS**

The Office Action dated May 21, 2008 has been received and carefully considered. In this response, claims 26, 54, 63, 64, 69, and 73 have been amended. No new matter has been added. Entry of the amendments to claims 26, 54, 63, 64, 69, and 73 is respectfully requested. Reconsideration of the current rejections in the present application is also respectfully requested based on the following remarks.<sup>1</sup>

I. THE OBVIOUSNESS REJECTION OF CLAIMS 26-29, 32, 38-47, 54-61, 63-65, 69, 71, AND 73

On pages 2-5 of the Office Action, claims 26-29, 32, 38-47, 54-61, 63-65, 69, 71, and 73 were rejected under 35 USC § 103(a) as being unpatentable over U.S. Publication No. 2003/0167380 ("Green") in view of U.S. Patent No. 6,598,131 ("Kedem"). This rejection is hereby respectfully traversed.

Under 35 U.S.C. § 103, the Patent Office bears the burden of establishing a prima facie case of obviousness. In re Fine, 837 F.2d 1071, 1074 (Fed. Cir. 1988). There are four separate

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<sup>1</sup> As Applicants' remarks with respect to the Examiner's rejections are sufficient to overcome these rejections, Applicants' silence as to assertions made by the Examiner in the Office Action or certain requirements that may be applicable to such rejections (e.g., assertions regarding dependent claims, whether a reference constitutes prior art, whether references are legally combinable for obviousness purposes) is not a concession by Applicants that such assertions are accurate or such requirements have been met, and Applicants reserve the right to analyze and dispute such in the future.

factual inquiries to consider in making an obviousness determination: (1) the scope and content of the prior art; (2) the level of ordinary skill in the field of the invention; (3) the differences between the claimed invention and the prior art; and (4) the existence of any objective evidence, or "secondary considerations," of non-obviousness. Graham v. John Deere Co., 383 U.S. 1, 17-18 (1966); see also KSR Int'l Co. v. Teleflex Inc., 127 S. Ct. 1727 (2007). An "expansive and flexible approach" should be applied when determining obviousness based on a combination of prior art references. KSR, 127 S. Ct. at 1739. However, a claimed invention combining multiple known elements is not rendered obvious simply because each element was known independently in the prior art. Id. at 1741. Rather, there must still be some "reason that would have prompted" a person of ordinary skill in the art to combine the elements in the specific way that he or she did. Id.; In re Icon Health & Fitness, Inc., 496 F.3d 1374, 1380 (Fed. Cir. 2007). Also, modification of a prior art reference may be obvious only if there exists a reason that would have prompted a person of ordinary skill to make the change. KSR, 127 S. Ct. at 1740-41.

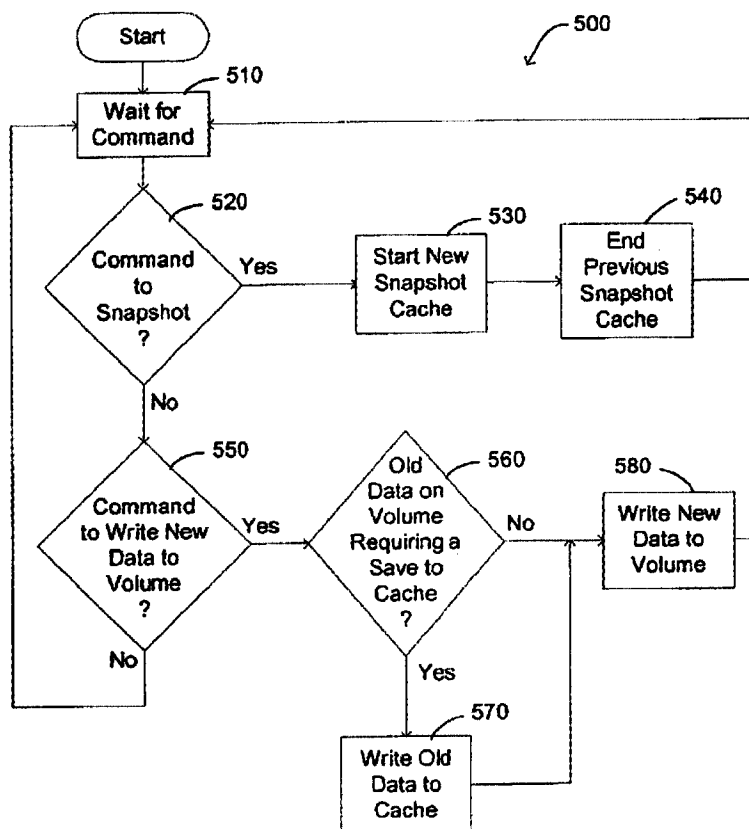
As stated in MPEP § 2143, to establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references

themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. In re Vaeck, 947 F.2d 488 (Fed. Cir. 1991).

As stated in MPEP § 2143.03, to establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. In re Royka, 490 F.2d 981 (CCPA 1974). That is, "[a]ll words in a claim must be considered in judging the patentability of that claim against the prior art." In re Wilson, 424 F.2d 1382 (CCPA 1970). Applicants respectfully submit that the combination of Green and Kedem fails to disclose all of the claim limitations of claims 26-29, 32, 38-47, 54-61, 63-65, 69, 71, and 73, as described more fully below.

Regarding claim 26, the Examiner asserts that the limitation "thereby accumulating backup data that enable restoration of the original data store to any point in time during the time interval. . ." is an intended use and is not to

be considered for patentability. Applicants respectfully disagree. However, to move the application forward to allowance, Applicants respectfully submit an amendment to claim 26 to further differentiate claim 26 from Green. Specifically, Green discloses a system and method to store and recall snapshots. The snapshots of the Green disclosure have a beginning time and an ending time. See, for example, Green paragraphs [0076] and Figure 5, which is reproduced below.



**Fig. 5**

As is abundantly clear by Figure 5, and explained in paragraph [0076] of the specification, snapshots do not overlap. That is, upon receiving a command to initiate a snapshot (element 520 of Figure 5), the current snapshot, if a current snapshot exists, is closed (element 540) and a new one is begun (element 530). Green does not appear to disclose a continuous capture of historical data, only a method to "freeze" the volume at discrete time intervals within one or more snapshots.

When a volume is to be reconstructed from a snapshot, the volume may only be reconstructed to reflect its state at discrete time intervals. The discrete time intervals are the times that the snapshots were created. Paragraph [0078] states: "the system, by means of accessing the current volume and the relevant snapshot caches, is able to reconstruct what the volume looked like at an historical point in time at which the respective snapshot was taken." A partial view of Green's Figure 6a, referenced in paragraph [0078], is reproduced below:

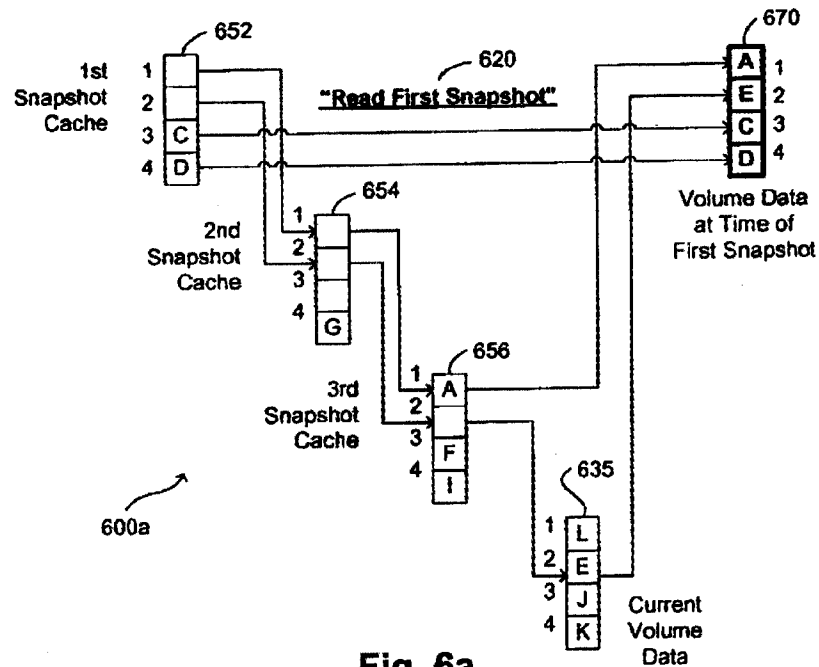
**Fig. 6a**

Figure 6a shows that a 1<sup>st</sup> Snapshot Cache, a 2<sup>nd</sup> Snapshot Cache, a 3<sup>rd</sup> Snapshot Cache, and the Current Volume Data are all used to recreate the volume at the time of the 1<sup>st</sup> Snapshot. The system and method of Green would not be able, for example, to recreate the volume at a time between the creation time of the 1<sup>st</sup> Snapshot Cache and the 2<sup>nd</sup> Snapshot Cache. Green is not able to restore the volume to any point in time during a time interval; it is only able to restore the volume to a state as it existed at each discrete snapshot. Therefore, Green does not disclose "backing up an original data store by receiving all write commands for the original data store during a time interval, so as to accumulate backup data for restoring the original data store to any point in time during the time interval . . . ,"

recited in claim 26. (emphasis added). The system and method of Green does not allow for restoration of data outside of the limited bounds of the individual snapshots.

Kedem also does not disclose backing up an original data store by receiving all write commands for the original data store during a time interval, thereby accumulating backup data that enable restoration of the original data store to any point in time during the time interval. . .," as claimed. Instead, Kedem discloses a method of managing a remote data image accessed by a local system by creating a local cache of the data image.

Regarding claims 27-29, 32, and 38-47, these claims are dependent upon independent claim 26. If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious. In re Fine, 837 F.2d 1071 (Fed. Cir. 1988). Thus, since independent claim 26 should be allowable as discussed above, claims 27-29, 32, and 38-47 should also be allowable at least by virtue of their dependency on independent claim 26. Moreover, these claims recite additional features which are not disclosed, or even suggested, by the cited references taken either alone or in combination. For example, claim 28 recites that "the original data store comprises a current store and a time store." Green and Kedem, either alone

or in combination, fail to disclose or suggest this claimed feature.

Regarding claims 54, 63, 64, 69, and 73, these claims recite subject matter related to claim 26. Thus, the arguments set forth above with respect to claim 26 are equally applicable to claims 54, 63, 64, 69, and 73. Accordingly, is it respectfully submitted that claims 54, 63, 64, 69, and 73 are allowable over Green and Kedem for the same reasons as set forth above with respect to claim 26.

Regarding claims 55-61 and 65, these claims are dependent upon independent claims 54 and 64, respectively. If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious. In re Fine, 837 F.2d 1071 (Fed. Cir. 1988). Thus, since independent claims 54 and 64 should be allowable as discussed above, claims 55-61 and 65 should also be allowable at least by virtue of their dependency on independent claims 54 and 64, respectively. Moreover, these claims recite additional features which are not disclosed, or even suggested, by the cited references taken either alone or in combination. For example, claim 59 recites "[t]he method of claim 58 wherein the original data store is implemented as a current store and a time store." Green and Kedem, either alone



or in combination, fail to disclose or suggest this claimed feature.

In view of the foregoing, it is respectfully requested that the aforementioned obviousness rejection of claims 26-29, 32, 38-47, 54-61, 63-65, 69, 71, and 73 be withdrawn.

II. THE OBVIOUSNESS REJECTION OF CLAIMS 30, 31, 33-37, 48-53, 62, 66-68, 70, and 72

On pages 6-8 of the Office Action, claims 30, 31, 33-37, 48-53, 62, 66-68, 70, and 72 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Green in view of Kedem, and in further view of Official Notice. This rejection is hereby respectfully traversed.

The Examiner appears to allege that each of the claims 30, 31, 33-37, 48-53, 62, 66-68, 70, and 72 is rendered obvious by Official Notice, as none of the rejection explanations are accompanied by citations to Green and/or Kedem. Applicants traverse this rejection because there is no support in the record for the conclusion that the identified features are in any way obvious or old and well known, as is required by the MPEP. "It would not be appropriate for the examiner to take official notice of facts without citing a prior art reference where the facts asserted to be well known are not capable of instant and unquestionable demonstration as being well known."

MPEP 2144.03. (emphasis in original). In accordance with MPEP § 2144.03, the Examiner must cite a reference in support of his positions with regard to claims 30, 31, 33-37, 48-53, 62, 66-68, 70, and 72.

Additionally, regarding claims 30, 31, 33-37, and 48-53, these claims are dependent upon independent claim 26. Regarding claim 62, this claim is dependent upon independent claim 54. Regarding claims 66-68, these claims are dependent upon independent claim 63. Regarding claims 70 and 72, these claims are dependent upon independent claim 69. If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious. In re Fine, 837 F.2d 1071 (Fed. Cir. 1988). Thus, since at least independent claims 26, 54, 63, and 69 should be allowable as discussed above, dependent claims 30, 31, 33-37, 48-53, 62, 66-68, 70, and 72 should also be allowable at least by virtue of their dependency the independent claims noted above. In view of the foregoing, it is respectfully requested that the aforementioned obviousness rejection of claims 30, 31, 33-37, 48-53, 62, 66-68, 70, and 72 be withdrawn.

III. CONCLUSION

In view of the foregoing, it is respectfully submitted that the present application is in condition for allowance, and an early indication of the same is courteously solicited. The Examiner is respectfully requested to contact the undersigned by telephone at the below listed telephone number, in order to expedite resolution of any issues and to expedite passage of the present application to issue, if any comments, questions, or suggestions arise in connection with the present application.

To the extent necessary, a petition for an extension of time under 37 CFR § 1.136 is hereby made.

Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 50-0206, and please credit any excess fees to the same deposit account.

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